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STEVEN R. DONOVAN

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EXAMINER

PARTON, KEVIN S

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 10/07/2003

29

Please find below and/or attached an Office communication concerning this application or proceeding.

Page

Office Action Summary

Application No.

09/435,540

Applicant(s)

DONOVAN, STEVEN R.

Examiner

Kevin Parton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 07/25/2003 have been fully considered but they are not persuasive. Please see the following reasons and the new grounds of rejection below.

2. All of applicant's arguments are based on the assertion that none of the cited references teach a limitation that has been added to the independent claims in this amendment. Specifically, the applicant argues that none of the references teach or suggest the system operates using "a plurality of communication protocols including a first protocol for communication session establishment, a second protocol for deploying policy, and a third protocol for authorization of the communication session" (page 11, paragraph 4). The applicant then goes on to point out that the Schulzrinne reference does indeed show a plurality of protocols. The applicant's arguments are not persuasive because the Schulzrinne reference does teach a plurality of protocols.

Specifically, a protocol for communication session establishment (SIP), a protocol for deploying policy (RSVP), and a protocol for authorization of the communication session (RSVP and BGP). The applicant points these out specifically and states that they do not read on the limitations of the claim. However, as written, these three protocols do read on the limitations of the claims.

3. Applicant's further arguments are all based on the secondary reference of the previous office action not teaching this amended limitation. Since this limitation is taught in the Schulzrinne reference, all further arguments are not persuasive for the same reasons shown above.

Election/Restrictions

4. Newly submitted claims 32 and 33 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: they are directed to a system primarily for the authorization of a communication session by a server. This system has a separate and independent function from the previously claimed system such as in an Intranet security application.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 32 and 33 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b), MPEP 821.03 and MPEP 818.02.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 9-11, 15-22, 24-26, 28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulzrinne et al. (1999) in view of Arao et al. (1999).

7. Regarding claim 1, Schulzrinne et al. (1999) teach a system for providing Internet Protocol (IP) communications over at least one network with Quality of Service (QoS), comprising the steps of:

- a. Means for initiating a communication session between at least one first end client device and at least one second end client device (page 1; figure 3).

- b. Providing information according to a plurality of communication protocols including a first protocol for communication session establishment (SIP), a second protocol for deploying policy (RSVP), and a third protocol for authorization of the communication session according to a QoS level (abstract; page 1, paragraph 1)
- c. In response to initiating the communication session, means for providing the information to at least one router of the communication session for enabling a Quality of Service policy in session packets arriving at the router and conveying information according to these protocols (page 3; Table 1; page 3).
- d. Means for establishing a communication session between the at least one first end client device and the at least one second end client device (page 1; figure 3).

Although the system disclosed by Schulzrinne et al. (1999) shows substantial features of the claimed invention, it fails to specifically disclose:

- a. In response to initiating the communication session, means for providing information to at least one server of the communication session, the information including at least one of resource usage, policy, authorization, authentication, and accounting information.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) disclose a system for QoS policy distribution wherein:

- a. In response to the initiation of the communication session, means for providing information to at least one server of the communication session, the information including at least one of resource usage, policy, authorization, authentication, and accounting information (page 1389, column 2, paragraph 6).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing the passing of parameters to an authorization, authentication, and accounting server. The advantages of doing this include centralization of security and access policy, and access only to privileged system administrators. This separation of function makes the system more secure and more reliable.

8. Regarding claim 2, Schulzrinne et al. (1999) and Arao et al. (1999) teach all the limitations as applied to claim 1. Schulzrinne further teaches means wherein the Quality of Service policy is in accordance with a Differentiated Services model the one router altering a Differentiated services field specifying Differentiated services code points of the session packets (page 1). Note that RSVP would set the routing points for the packet at the router.

9. Regarding claim 9, Schulzrinne et al. (1999) teach means wherein the step of providing information to at least one router of the communication session is according to the second protocol, further comprises the steps of:

- a. Sending a message installing policy to at least one router (page 3).

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- b. Sending a message (from the router) (page 4).

Although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose:

- a. Sending a message requesting a local policy decision; and
- b. Sending a message (from the router) confirming installation.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) discloses:

- a. Sending a message requesting a local policy decision (page 1389, column 2, paragraph 6; page 1391, column 2, figure).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by having routers request local policy decisions. This allows the routers to be updated with the most current usage statistic, or authentication information.

Further, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by having a message sent from the router to confirm installation of the local policy decision. This is necessary and advantageous because the server is able to accurately manage all routers on which the policy has been installed, not just those that the policy was sent to. Any errors in communication or installation can be remedied with a re-submission of the policy to the router.

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10. Regarding claim 10, Schulzrinne et al. (1999) and Arao et al. (1999) teach all the limitations as applied to claim 9. Schulzrinne further teaches means wherein the at least one router performs according to a Differentiated Services model (page 1).

11. Regarding claim 11, Schulzrinne et al. (1999) and Arao et al. (1999) teach all the limitations as applied to claim 9. Schulzrinne et al. (1999) further disclose means wherein steps (a)-(c) (from claim 9) are performed on a plurality of routers, one of the plurality of routers being a local router for the first end client device, and one of the plurality of routers being a local router for the second end client device (page 3). Note that Schulzrinne et al. (1999) do not limit the number of involved routers and the location in relation to the clients.

12. Regarding claim 15, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the network uses an authorization token to indicate that a session is authorized.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999)

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al by utilizing an authorization token. The use of a token is advantageous because it allows for control of each entity utilizing the service.

Authorized sessions can be monitored and accurately logged for system administrators and security applications. Note that any of a number of authorization methods would have been appropriate.

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13. Regarding claim 16, Schulzrinne et al. (1999) disclose a system for providing Internet Protocol (IP) communications over at least one network with Quality of Service (QoS) with means for:

- a. Initiating termination of a communication session between at least one first end client device and at least one second end client device (page 4, paragraph 1).
- b. Providing information according to a plurality of communication protocols including a first protocol for communication session establishment (SIP), a second protocol for deploying policy (RSVP), and a third protocol for authorization of the communication session according to a QoS level (BGP and RSVP) (abstract, page 1).
- c. Providing information to at least one router of the communication session (page 3).

Although the system disclosed by Schulzrinne (1999) shows substantial features of the claimed invention, it fails to disclose in response to termination:

- a. Providing information to at least one server of the communication session, the information including at least one of resource usage, policy, authorization, authentication, and accounting information.
- b. De-installing a QoS policy at the router.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

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In an analogous art, Arao et al. (1999) disclose a system for QoS policy distribution wherein:

- a. In response to the termination of the communication session, means for providing information to at least one server of the communication session, the information including at least one of resource usage, policy, authorization, authentication, and accounting information (page 1389, column 2, paragraph 6).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing the passing of parameters to an authorization, authentication, and accounting server. The advantages of doing this include centralization of security and access policy, and access only to privileged system administrators. This separation of function makes the system more secure and more reliable.

Further, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing the de-installation of policy at the routers. The applicant acknowledges in the specification that the de-installation of policy upon session teardown is a commonly known feature (page 10, paragraph 2). This benefits the system by allowing unused routers to be quickly cleared of unnecessary policy information.

14. Regarding claim 17, Schulzrinne et al. (1999) teach all the limitations as applied to claim 16. They further teach means wherein the Quality of Service policy is in accordance with a Differentiated service model (page 1).

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15. Regarding claim 18, Schulzrinne et al. (1999) teach all the limitations as applied to claim

16. They further teach means wherein terminating the session is done according to the first protocol and means for:

- a. Sending a termination message from the at least one first end client device to that at least one second end client device (page 1).
- b. Sending a message indicating receipt of the termination message by the at least one second end client device (page 1). Note that in the reference, this session teardown method is an inherent part of the SIP standard.

16. Regarding claim 19, Schulzrinne et al. (1999) teach all the limitations as applied to claim

18. They further teach means wherein the first protocol includes a Session Initiation Protocol (SIP) (page 1).

17. Regarding claim 20, Schulzrinne et al. (1999) teach all the limitations as applied to claim

16. They further teach means wherein the network includes at least one additional server for receiving and forwarding termination messages (figure 2, 'proxy').

18. Regarding claim 21, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 18) shows substantial features of the claimed invention, it fails to disclose means for:

- a. Sending a message requesting de-installation of policy corresponding to at least one policy server.
- b. Sending a message responding to the message in (a) confirming the de-installation of the policy.

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Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing the de-installation of policy at the routers. The applicant acknowledges in the specification that the de-installation of policy upon session teardown is a commonly known feature (page 10, paragraph 2). This benefits the system by allowing unused routers to be quickly cleared of unnecessary policy information.

19. Regarding claim 22, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 21) shows substantial features of the claimed invention, it fails to disclose means wherein steps (a) and (b) are performed by a plurality of policy servers, one of the plurality of policy servers being a local policy server for the first end client device, and one of the plurality of policy servers being a local policy server for the second end client device.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) disclose a system for distribution of QoS policy wherein policy installation is performed by a plurality of policy servers, one of the plurality of policy servers being a local policy server for the first end client device, and one of the plurality of policy servers being a local policy server for the second end client device (page 1389, column 2, paragraph 6; page 1391, column 2, figure).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999)

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by sending messages to and from the policy server. The benefit of passing QoS parameters to and from this policy server is the increased oversight and the ability to alter QoS policy and decisions at a single point for each client device.

20. Regarding claim 24, Schulzrinne teaches means wherein information is provided according to the second protocol (Abstract, Page 1). Although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 16) shows substantial features of the claimed invention, it fails to disclose means for:

- a. Receiving a message requesting de-installation of a local policy decision corresponding to the terminating session.
- b. Sending a message directing a de-installation of the policy to at least one router.
- c. Receiving a message confirming de-installation.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing the de-installation of policy at the routers. The applicant acknowledges in the specification that the de-installation of policy upon session teardown is a commonly known feature (page 10, paragraph 2). This benefits the system by allowing unused routers to be quickly cleared of unnecessary policy information. Additionally, this set of steps is common in the installation of policy and would be also applied to the de-installation so that it is confirmed that policy has been de-installed.

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21. Regarding claim 25, Schulzrinne et al. (1999) teach all the limitations as applied to claim

24. They further teach means wherein the at least one router performs according to a

Differentiated Services model (page 1).

22. Regarding claim 26, Schulzrinne et al. (1999) teach all the limitations as applied to claim

24. They further teach means wherein steps (a)-(c) are performed on a plurality of routers, one

of the plurality of routers being a local router for the first end client device, and one of the

plurality of routers being a local router for the second end client device (page 3). Note that in the reference, QoS policy is distributed to all routers.

23. Regarding claim 28, although the system disclosed by Schulzrinne et al. (1999) (as

applied to claim 24) shows substantial features of the claimed invention, it fails to disclose

means wherein a policy server performs step (a) by storing information concerning at least one

of resource usage, policy, authorization, authentication, and accounting information concerning the terminating session.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) disclose a system for QoS policy distribution wherein a policy server performs the termination step by storing information concerning at least one of resource usage, policy, authorization, authentication, and accounting information concerning the terminating session (page 1389, column 2, paragraph 6).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999)

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by employing the passing of parameters to an authorization, authentication, and accounting server. The advantages of doing this include centralization of security and access policy, and access only to privileged system administrators. This separation of function makes the system more secure and more reliable.

24. Regarding claim 31, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 16) shows substantial features of the claimed invention, it fails to disclose means wherein the network uses an authorization token to indicate that a session is authorized.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999)

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al by utilizing an authorization token. This is a commonly used method and fits well within the paradigm claimed. The use of a token is advantageous because it allows for control of each entity utilizing the service. Authorized sessions can be monitored and accurately logged for system administrators and security applications. Note that any of a number of authorization methods would have been appropriate.

25. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulzrinne et al. (1999) and Arao et al. (1999) as applied to claim 1 above, and further in view of Eriksson et al.

26. Regarding claim 3, although the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the step of initiating a communication session is performed according to the first protocol (SIP), and further comprises the steps of:

- a. Sending an initiation message from the at least one first end client device to the at least one second end client device;
- b. Sending a message indicating receipt of the initiation message by the at least one second end client device;
- c. Sending a message indicating the at least one second end client device is responding to the initiation message; and
- d. sending a message indicating a receipt of the message in (c) by the at least one first end client device and signaling the start of the communication session.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999), as evidenced by Eriksson et al. (1999)

In an analogous art, Eriksson et al. (1999) disclose means wherein the step of initiating a communication session is performed according to the first protocol (SIP), and further comprises the steps of:

- a. Sending an initiation message from the at least one first end client device to the at least one second end client device (page 15);
- b. Sending a message indicating receipt of the initiation message by the at least one second end client device (page 15);
- c. Sending a message indicating the at least one second end client device is responding to the initiation message (page 15); and

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- d. Sending a message indicating a receipt of the message in (c) by the at least one first end client device and signaling the start of the communication session (page 15).

Given the teaching of Eriksson et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) and Arao et al. (1999) by this set of call initiation steps. These steps are intrinsic to the Session Initiation Protocol (SIP) that is specifically geared and optimized for Internet Telephony and high priority communications over the Internet. It is therefore a clear choice for this application.

27. Regarding claim 4, Schulzrinne et al (1999) teach all the limitations as applied to claim 3. They further teach means wherein the first protocol includes Session Initiation Protocol (SIP) (page 1)

28. Regarding claim 5, Schulzrinne et al. (1999), Arao et al. (1999), and Eriksson et al. (1999) teach all the limitations as applied to claim 3. Schulzrinne further teaches means wherein the network includes at least one server for receiving and forwarding initiation messages (page 12). Note that in the reference, the INVITE message is the initiation message that is forwarded.

29. Regarding claim 6, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 4) shows substantial features of the claimed invention, it fails to disclose means wherein the at least one server is a policy server, the step of providing information to the at least one server of the communication session is according to the second protocol, and further comprises the steps of:

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- i. Sending a message requesting the at least one of resource usage, policy, authorization, authentication, and accounting information to at least one policy server, and
- ii. Sending a message responding to the message in (a) with at least one of resource usage, policy, authorization, authentication, and accounting information; wherein the at least one of resource usage, policy, authorization, authentication, and accounting information is according to the at least one QoS policy.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999) (as applied to claim 1 and as further stated below).

In an analogous art, Arao et al. (1999) discloses means wherein the at least one server is a policy server, the step of providing information to the at least one server of the communication session is according to the second protocol, and further comprises the steps of:

- a. Sending a message requesting the at least one of resource usage, policy, authorization, authentication, and accounting information to at least one policy server (page 1389, column 2, paragraph 6).
- b. Sending a message responding to the message in (a) with at least one of resource usage, policy, authorization, authentication, and accounting information (page 1389, column 2, paragraph 6; page 1391, column 2, figure).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by sending messages to and from the policy server. The benefit of passing QoS parameters to

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and from this policy server is the increased oversight and the ability to alter QoS policy and decisions at a single point.

30. Regarding claim 7, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein steps (a) and (b) are performed on a plurality of policy servers, one of the plurality of policy server being a local policy server for the first end client device, and one of the plurality of policy servers being a local policy server for the second end client device.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) discloses means wherein steps (a) and (b) of claim 6 are performed on a plurality of policy servers (page 1389, column 2, paragraph 6; page 1391, column 2, figure), one of the plurality of policy server being a local policy server for the first end client device, and one of the plurality of policy servers being a local policy server for the second end client device.

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing multiple servers for clients in different domains. This allows for increased flexibility in policy and on the system in general. Users in each domain would be able to establish and implement policy specific to their function instead of adhering to the policy of the administrative center.

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31. Claims 8, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulzrinne et al. (1999), Arao et al. (1999), and Eriksson as applied to claim 6 above, and further in view of Boyle et al. (1999).

32. Regarding claim 8, although the system disclosed by Schulzrinne et al. (1999), Arao et al. (1999), and Eriksson (as applied to claim 6) shows substantial features of the claimed invention, it fails to disclose means wherein the second protocol includes Common Open Policy Service (COPS).

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), Arao et al. (1999), and Eriksson, as evidenced by Boyle et al. (1999).

In an analogous art, Boyle et al disclose means wherein the second protocol includes Common Open Policy Service (COPS) (page 3). Note that in the reference, the requests of the PEP conform to the steps a) and b) of claim 6.

Given the teaching of Boyle et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) and Arao et al. (1999) by employing COPS. Using this is advantageous here because COPS is specifically geared and optimized for Internet Telephony and high priority communications over the Internet. Any standard for trading of parameters would be beneficial in the claimed system due to the fact that it gives a known interface for new clients.

33. Regarding claim 13, although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 8) shows substantial features of the claimed invention, it fails to disclose means wherein the network includes at least one clearinghouse server, the clearinghouse server

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providing resource usage, policy, authentication, authorization, and accounting information to each of the plurality of policy servers, the method further comprising the steps of:

- a. Means for sending a message requesting at least one of resource usage, policy, authentication, authorization, and accounting information to the at least one clearinghouse server according to the third protocol; and
- b. Means for sending a message including at least one of resource usage, policy, authentication, authorization, and accounting information to the at least one policy server according to the third protocol.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al, as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) discloses means wherein the network includes at least one clearinghouse server, the clearinghouse server providing resource usage, policy, authentication, authorization, and accounting information to each of the plurality of policy servers (page 1389, column 2, paragraph 6; page 1391, column 2, figure), the method further comprising the steps of:

- a. Means for sending a message including at least one of resource usage, policy, authentication, authorization, and accounting information to the at least one policy server according to the third protocol (page 1389, column 2, paragraph 6; page 1391, column 2, figure).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing a clearinghouse server to send policy information to the policy servers local to

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each client or system. This is advantageous because it allow for multiple levels of control. The central administrator can make policy decisions for all domain servers, while each domain server can be configured for that specific domain.

Also, it would further be obvious that the policy servers could send a message requesting at least one of resource usage, policy, authentication, authorization, and accounting information to the at least one clearinghouse server. Doing this is advantageous because it removes the need for constant update by the clearinghouse server and free up resources for other communication.

34. Regarding claim 14, although the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999) (as applied to claim 13) shows substantial features of the claimed invention, it fails to disclose means wherein the third protocol includes an open Settlement Policy (OSP).

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne and Arao et al. (1999) by employing the use of an Open Settlement Policy for these steps. Doing this is advantageous because OSP was specifically designed for use in Internet telephony and communications and is optimized for this application.

35. Claims 12, 23, 27, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulzrinne et al. (1999) and Arao et al. (1999) as applied to claim 9 above, and further in view of Boyle et al. (1999).

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36. Regarding claim 12, although the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999) (as applied to claim 9) shows substantial features of the claimed invention, it fails to disclose means wherein the second protocol includes Common Open Policy Service (COPS).

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999), as evidenced by Boyle et al. (1999).

In an analogous art, Boyle et al disclose means wherein the second protocol includes Common Open Policy Service (COPS) (page 3). Note that in the reference, the requests of the PEP conform to the steps (a)-(c) of claim 9.

Given the teaching of Boyle et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) and Arao et al. (1999) by employing COPS. Any standard for trading of parameters would be beneficial in the claimed system due to the fact that it gives a known interface for new clients. Using this is advantageous here because COPS is specifically geared and optimized for Internet Telephony and high priority communications over the Internet.

37. Regarding claim 23, although the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999) (as applied to claim 21) shows substantial features of the claimed invention, it fails to disclose means wherein the second protocol includes a Common Open Policy Service (COPS).

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999), as evidenced by Boyle et al. (1999).

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In an analogous art, Boyle et al disclose means wherein session teardown steps use a Common Open Policy Service (COPS) (page 3).

Given the teaching of Boyle et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) and Arao et al. (1999) by employing COPS. Any standard for trading of parameters would be beneficial in the claimed system due to the fact that it gives a known interface for new clients. Using this is advantageous here because COPS is specifically geared and optimized for Internet Telephony and high priority communications over the Internet.

38. Regarding claim 27, although the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999) (as applied to claim 24) shows substantial features of the claimed invention, it fails to disclose means wherein the second protocol includes a Common Open Policy Service (COPS).

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999) and Arao et al. (1999), as evidenced by Boyle et al. (1999).

In an analogous art, Boyle et al disclose means wherein session teardown steps use a Common Open Policy Service (COPS) (page 3).

Given the teaching of Boyle et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) and Arao et al. (1999) by employing COPS. Any standard for trading of parameters would be beneficial in the claimed system due to the fact that it gives a known interface for new clients. Using this is advantageous here because COPS is specifically geared and optimized for Internet Telephony and high priority communications over the Internet.

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39. Regarding claim 29, Schulzrinne teach means for providing information according to the third protocol (Abstract, page 1). Although the system disclosed by Schulzrinne et al. (1999) (as applied to claim 27) shows substantial features of the claimed invention, it fails to disclose means for:

- a. Sending a message reporting at least one of resource usage, policy, authentication, authorization, and accounting information concerning terminating the session to the at least one clearinghouse server.
- b. Sending a message confirming the receipt of the message in step (a) to the at least one policy server.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al. (1999), as evidenced by Arao et al. (1999).

In an analogous art, Arao et al. (1999) discloses for:

- a. Sending a message reporting at least one of resource usage, policy, authentication, authorization, and accounting information concerning terminating the session to the at least one clearinghouse server (page 1389, column 2, paragraph 6; page 1391, column 2, figure).
- b. Sending a message confirming the receipt of the message in step (a) to the at least one policy server (page 1389, column 2, paragraph 6; page 1391, column 2, figure).

Given the teaching of Arao et al. (1999), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999)

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by employing a clearinghouse server to send policy information to the policy servers local to each client or system. This is advantageous because it allow for multiple levels of control. The central administrator can make policy decisions for all domain servers, while each domain server can be configured for that specific domain. Further it benefits to the system to have receipt confirmation so the likelihood of an unseen error is low.

40. Regarding claim 30, although the system disclosed by Schulzrinne et al. (as applied to claim 29) shows substantial features of the claimed invention, it fails to disclose means wherein the third protocol includes Open Settlement Policy (OSP).

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Schulzrinne et al (1999).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Schulzrinne et al. (1999) by employing the use of the OSP standard. The OSP standard is pointed out in the applicant's specification as prior art (page 10). This benefits the system because OSP is specifically useful when there is a central clearinghouse server in a large sized network.

Conclusion

41. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Kevin Parton
Examiner
Art Unit 2153

ksp


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